[Claims]

[1] An imidazolium compound represented by Formula (I) below:

$$\begin{array}{c|c}
R_1 \\
\hline
R_4 \\
\hline
N \\
R_3
\end{array}$$

$$\begin{array}{c}
R_2 \\
\hline
N \\
\end{array}$$

$$\begin{array}{c}
X \\
\end{array}$$

$$\begin{array}{c}
X \\
\end{array}$$

in which, R_1 , R_2 , R_3 , and R_4 independently denote a hydrogen atom, an optionally substituted alkyl group having 1 to 10 carbon atoms, an optionally substituted cycloalkyl group having 3 to 10 carbon atoms, an optionally substituted alkenyl group having 2 to 10 carbon atoms, or an optionally substituted aryl group having 6 to 10 carbon atoms, and X^- is Cl^- , Br^- , I^- , BF_4^- , PF_6^- , $CF_3SO_3^-$, or $(CF_3SO_2)_2N^-$, with the proviso that when R_1 is an alkyl group having 1 to 3 carbon atoms, X^- is BF_4^- , PF_6^- , $CF_3SO_3^-$, or $(CF_3SO_2)_2N^-$, and a case in which R_2 to R_4 are hydrogen atoms, R_1 is an allyl group, and X^- is Br^- is excluded.

- [2] The imidazolium compound according to Claim 1, wherein R_1 is preferably an alkyl group having 4 to 8 carbon atoms or an alkenyl group having 2 to 4 carbon atoms.
- [3] The imidazolium compound according to either Claim 1 or 2, wherein R_1 is an allyl group.

[4] A solvent comprising an imidazolium compound represented by Formula (I) below:

$$\begin{array}{c|c}
R_1 \\
 \\
R_4 \\
 \\
N_+ \\
R_2
\end{array}$$
(I)

in which, R_1 , R_2 , R_3 , and R_4 independently denote a hydrogen atom, an optionally substituted alkyl group having 1 to 10 carbon atoms, an optionally substituted cycloalkyl group having 3 to 10 carbon atoms, an optionally substituted alkenyl group having 2 to 10 carbon atoms, or an optionally substituted aryl group having 6 to 10 carbon atoms, and X⁻ is Cl^- , Br^- , I^- , BF_4^- , PF_6^- , $CF_3SO_3^-$, or $(CF_3SO_2)_2N^-$.

[5] An electrolyte material comprising the imidazolium compound according to Claim 4, wherein X^- is BF_4^- , PF_6^- , $CF_3SO_3^-$, or $(CF_3SO_2)_2N^-$.